Western Region Newsletter

OCTOBER 2011

National Weather Service

In This Issue:

Regional Director's Message

Dear Western Region Employees,

I had the great pleasure of attending the dedication ceremony for the Langley Hill Weather Radar on September 29.

I would like to applaud the efforts of the staff at WFO Seattle, WFO Portland, Western Region Headquarters and the Radar Operations Center for their support in helping to bring this new radar to the State of Washington.

This radar was successfully upgraded to dual pol on September 26, the first radar to be upgraded during the deployment phase. The radar will also be the first site to test the 0° angle which is scheduled for November.

The new radar is a welcome addition to the National Weather Service tool set and will help improve forecaster confidence during high impact weather. This new radar has expanded coverage in the terrain-blocked region improving the prediction of storm systems that frequently affect Washington State, the Pacific Northwest and beyond.

Vickie

Brad Colman, WFO Seattle MIC, emcees the dedication ceremony

Featured Decision Support

A new section of the newsletter being added this month is “Weather Story of the Month”. As part of improving Decision Support Services (DSS) across Western Region (WR), the WR DSS Group will select the one that they see as the most eye appealing graphic and also ties in DSS the best. We will also explain why we chose that graphic along with a tip or two to help improve your weather stories during high impact events.

This month’s Weather Story of the Month was developed by Michael Stroz, a general forecaster at WFO Eureka, CA. The graphic highlights the first big wave event of the season for that portion of the Pacific coast. The impact for this event is very clearly defined in that increasing wave activity can pose a threat to beachgoers. A few other visually appealing items about the graphic are that the font type and size are easy to read and there is not an overload of words. This graphic was designed and enhanced based on a template that was initially developed over a year ago. As a result, the graphic took at most 10-15 minutes to produce and send to the web. The Eureka office received some positive feedback from local customers by word of mouth as well as on their Facebook page. Great job WFO Eureka!

Tip of the Month: Be careful when using technical jargon. In this case, WFO Eureka has spent considerable amount of time educating the public about sneaker waves. However, the term sneaker wave may not be appropriate in other coastal areas due to a lack of recognition of the term.

Elko Sky Fair Draws Record Attendance

The Elko Sky Fair is traditionally held on the first Saturday after the long Labor Day holiday weekend in September. This is a time when families have returned from summer vacations and most students are back in the classroom. The dog days of summer have passed with more tolerable outside conditions taking place. The Elko Sky Fair weekend was no exception. A day in the low 80s with a mix of sun and clouds could not have been a more perfect set up to bring in a record attendance of over 5000 people through the entrance gate.

Pictured (l to r): Michael Fitzsimmons (WCM) and Donald Dumont (General Forecaster) handing out information and answering questions at the Elko Sky Fair

WFO Elko has been part of the Elko Sky Fair tradition for the past several years. Their informational booth focused on the theme of September's National Preparedness Month with handouts on developing a preparedness kit, having a family plan in place and above all how to be informed of significant weather events and to take appropriate actions. Disaster preparedness wheels, brochures and conversations with members of the WFO Elko staff helped the 700 people attending our booth get prepared for hazards of all types.

WFO Medford Hosts Aviation Open House

John Werth, Seattle CWSU MIC, informs pilots about CWSU products and services

On September 10, WFO Medford, Oregon hosted an aviation open house. There were two primary goals for the event—educate local pilots on NWS aviation weather products and gather feedback that can be used to enhance decision support to the customer.

The open house started with Michael Petrucelli's presentation entitled, "How to Get the Most Out of an Area Forecast Discussion" and transitioned to a tour of the Medford forecast office with special emphasis on the process involved in creating effective aviation forecasts. John Werth, CWSU Auburn MIC, then spoke to attendees about the role of CWSUs and the services they provide to pilots and Air Traffic Control. Next, Shad Keene demonstrated how to gain increased situational awareness by using the WFO Medford aviation webpage. The open house culminated in a roundtable discussion where pilots identified strong winds aloft and low clouds/visibility as the most significant impacts to their flight safety.

WFO San Diego tours Coachella Valley Water District

Mark Johnson of the Coachella Valley Water District, and three of their staff gave WFO San Diego's Roger Pierce, Alex Tardy, Joe Dandrea and Tina Stall a full day tour of their water system and monitoring. The tour started at the Whitewater River at the California Aqueduct outflow that was pushing 600 CFS into the Whitewater near I-10. The tour then proceeded to the diversion and storage ponds along the river including a visit to the USGS gauge. Twenty ponds are used to divert and store aqueduct water and storm water. A unique responsibility of the water district is managing storm water runoff from mountains and valley rainfall along with supplying fresh water to the system with the goal to recharge the aquifer (ground water table) north of Salton Sea.

Group begins the tour at the California aqueduct outlet and Whitewater River.

The tour continued with a drive and walk along the Whitewater overflow channel that can flood parts of Rancho Mirage and Palm Desert areas. The channel can hold up to 60,000 CFS and also serves to drain nearby mountains and storm water. During the dry season the channel has golf course runways. Extensive maintenance is required to keep the Whitewater River, channel, canals and storage ponds clear of debris and silt. Excessive upstream rainfall in the summer monsoon or winter storms can cause severe damage to the flood gates and storage ponds. Efforts are continuing to repair damage from 2009 and 2010 heavy runoff events. Near the channel and on the outskirts of the residential areas they visited a large storage pond and spillway west of the cities, used to reduce flow and debris from heavy precipitation events in normally dry washes from the mountains. They received a tour of the 24-hour operations in the control room and the large 2-story new facility where over 100 employees and engineers work. Finally, they visited the southern end of the system where another 600 CFS was entering directly from the Colorado River aqueduct (from I-8). This is the first year in a while where there was a surplus to the aquifer system and when 1200 CFS continues for flow into the system. The water district offers recycled water for the 130 golf courses and also provides all the drinking water for the valley. Most of the city water is obtained from wells that tap into the aquifer.

Roger Pierce and Joe Dandrea examine the controlled river and the overflow drainage, near the USGS gauge (far background).

The Coachella Valley Water District relies on WFO San Diego and the California-Nevada River Forecast Center for decision support by monitoring NWS web sites and utilizing iNWS to get timely hydrologic and weather information, warnings, and advisories. The tour was integral for managers and forecasters to better serve the needs of the Coachella Valley Water District and to understand the management of water in a unique desert climate.

Colorado aqueduct entering the Coachella Valley system (about 600 CFS).

WFO Flagstaff Happenings

What appears to be the third highest tornado confirmed in the United States swept up the west side of the San Francisco Peaks early in the evening of Sept 14, 2011. Damage surveys confirmed that a tornado, with a discontinuous path length of 1.3 miles, started near 9,200' and continued up the mountain with significant tree damage to over 10,500' in elevation. Damage in the path was estimated at mostly EF-0 and EF-1, with isolated areas of EF-2 damage. The picture at right illustrates some of the damage along the Humphrey's Peak Trail.

Members of the WFO Flagstaff took to Interstate 40 for several hours on Saturday, September 17, to pick up trash as a part of the local 'Adopt a Highway' program. WFO Flagstaff is committed to cleaning several miles of Interstate 40 west of Flagstaff several times a year. Pictured here during the clean-up are ESA Stephen Kusyj, Intern Rob Rickey, WCM George Howard, MIC Brian Klimowski, and Intern Chris Outler.

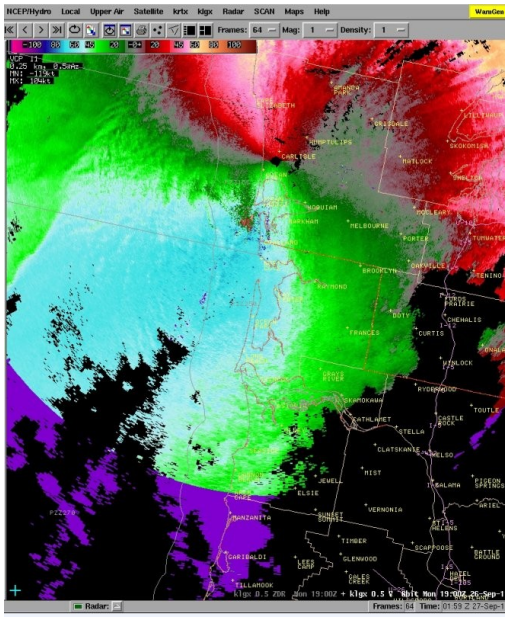
WFO Billings Forecasters Visit a Prescribed Burn

Dan Borsum taking observations on the Boone Mountain prescribed burn

In mid-September, WFO Billings Lead Forecaster and IMET Dan Borsum was onsite in the Gallatin National Forest at a project in the Boulder River drainage, introducing fire to a 4000 acre area. The goal of the Boone Mountain prescribed burn (south of Big Timber, MT) was to restore the fire cycle to a Douglas Fir habitat. The burn required onsite support due to multiple factors, most notably significant air operations, the large amount of resources, its proximity to private land, and the concern of burning in the fall in climatologically wind-prone areas.

Dan operated exclusively from an SUV, and provided onsite briefings and updates without the benefit of established communications. The forecast concerns of the Fire Managers ranged from instantaneous wind forecasts to the potential arrival of moisture in the 7-10 day range. He utilized a theodolite and pilot balloons and analyzed winds aloft over the area to help determine likely directions for smoke travel. WFO Billings took advantage of the close proximity of the prescribed burn to send three forecasters (Brian Tesar, Joe Lester, and Chauncy Schultz) to shadow Dan for several hours to get a first hand look at the type of decision support an IMET typically provides while operating in a primitive environment.

Washington Coastal Radar Up and Running



The new weather radar on the Washington Coast is up and running and was also upgraded with state-of–the art Dual Pol capability. The Washington Coast Radar, known as the Langley Hill radar, designated KLGX, is located approximately 3 miles east of Copalis Beach in Grays Harbor County, WA. Senator Maria Cantwell (D-WA), led the effort to secure funding for this radar in the 2990 omnibus appropriations bill and 2010 Consolidated Appropriations Act.

The Washington coastal radar will be a tremendous asset to the Seattle and Portland forecast offices to improve detection and monitoring of storms that come in from the Pacific Ocean. Previously the inland radars from WFOs Seattle and Portland provided limited coverage of these storms.

Almost as soon as the radar became operational, the first strong Pacific storm of the fall season produced high winds along the northwest Oregon and southwest Washington Coast in late September. The forecasters found the radar to be a very effective tool for helping monitor the strength of this storm, which provided storm force winds over the marine area and high winds along the coast. At right is a 0.5 degree velocity image from KLGX that clearly shows 60 mph winds occurring at low elevations along the northwest Oregon and southwest Washington coast and adjacent coastal waters.

IMET Thanks WFO Medford

On September 12, Brett Lutz, WFO Medford General Forecaster and IMET, passed along his thanks to the WFO Medford staff for the great support he received while on the Umpqua Complex Fire.

Helicopter dropping water on the Garwood Fire of the Umpqua Complex

Together they coordinated a storm threat to the area. This allowed Lutz to send out two accurate weather updates to those working the fire. The first was for a cell that had been severe, and then moved over Cinnamon Butte. Since radio communications for the team on the Umpqua Complex had not been established yet, he relayed these two updates to Roseburg Dispatch to get them transmitted to the firefighters in the forest.

Based on the weather update two helicopters were brought back to the helispot in camp and held on the ground for about an hour until the storm activity in the area dissipated. The second update was for sounding the "all clear" when the thunderstorm threat had dissipated around 515 pm.

Lutz passed along his thanks to WFO Medford who aided him in the decision support for the fire.

Oxnard Becomes a TsunamiReady Community

Pictured (l to r): Eric Boldt, WCM, WFO Los Angeles/Oxnard; Phillip Gregoire, Oxnard Streets Division Manager; Chief Joe Milligan, Oxnard Fire Dept.; Deborah O'Malia, Oxnard Disaster Preparedness Coordinator; Mark Jackson, MIC, WFO Los Angeles/Oxnard; Cynthia Elliott, Program Administrator, Ventura County Sheriff's Office of Emergency Services.

The city of Oxnard, CA, the largest city in Ventura County, met all the verification requirements to become designated as a TsunamiReady community. A brief ceremony was held during the city council meeting at the Oxnard City Hall on September 13, 2011.

Deborah O'Malia, Disaster Preparedness Coordinator, provided the introduction to the Oxnard city council for the ceremony. Eric Boldt, WFO Los Angeles/Oxnard Warning Coordination Meteorologist, described to the city council and audience what requirements and steps were taken by the city to become TsunamiReady. Finally, Mark Jackson, Meteorologist in Charge, praised city officials for their commitment to safety and preparedness for the citizens of Oxnard by supporting the TsunamiReady program. He presented a certificate and two TsunamiReady signs to the City Council to complete the ceremony. The city of Oxnard became a StormReady community in May 2010.

WFO Great Falls StormReady Ceremonies

Beaverhead County ceremony, Sept 12th: Pictured (l to r): Deputy Disaster and Emergency Services Coordinator, Scott Marsh; and WFO Great Falls WCM, Ben Schott

Hill County ceremony, Sept 13th: Pictured (l to r): Disaster and Emergency Services Coordinator, Joe Parenteau; County Commissioners, Michael Wendland and Kathy Bessette; and WFO Great Falls WCM, Ben Schott

City of Havre ceremony, Sept 13th: Pictured (l to r): Mayor Tim Solomon, WFO Great Falls WCM Ben Schott, and School Superintendent Andy Carlson

WFO Oxnard Visits Harbors in California

During the week of September 19-23, WFO Los Angeles/Oxnard forecasters Ryan Kittell and Curt Kaplan visited every harbor from San Luis Obispo County to Los Angeles County. During this marine tour, they were able to meet with local harbor patrols and coast guards, as well as commercial and private boaters.

As a result of these meetings, they were able to more than double the members of their local Marine User Group, as well as enroll a number of key partners into NWS chat. Ryan and Curt were also able to educate users on the true definition of significant wave height, as well helping them to find key products on NWS web pages all in the name of enabling them to make better weather-related decisions.

Forecasters Curt Kaplan (left) and Ryan Kittell (right) during their meeting with Ventura Harbor Patrol Officer, John Higgins.

WFO Sacramento Participates in “Be Prepared” Fair

WFO Sacramento participated in the annual California "Be Prepared" Fair on September 7, 2011. The event was held at the California State Capitol and sponsored by the California Emergency Management Agency. The National Weather Service joined other state and federal agencies that work directly with preparedness and hazard mitigation issues, including those focusing on water safety, earthquake hazard mitigation, and community preparedness.

The NWS booth had the usual mix of brochures to take home. However it featured the table top flood model that illustrates how several rainstorms in a row can increase the potential for areal flooding, a Van de Graaff machine that gives participants a chance to feel when lightning danger is high and safety should be sought, and a tornado chamber. The audience was a mix of state legislators and office workers from the area as well as a large number of school children who came specifically for the event.

SOD Installs Microsoft AD Domain Controllers

Kristie O’Connor, Chad Hill, the National Active Directory Systems manager, and IT staff from the WFOs have been working at installing Microsoft Active Directory Domain Controllers (AD DCs) in the Western Region Field Offices. In addition to providing continuity of local service during WAN outages, it is expected that local DCs will improve boot up and log in performance for domain connected computers.

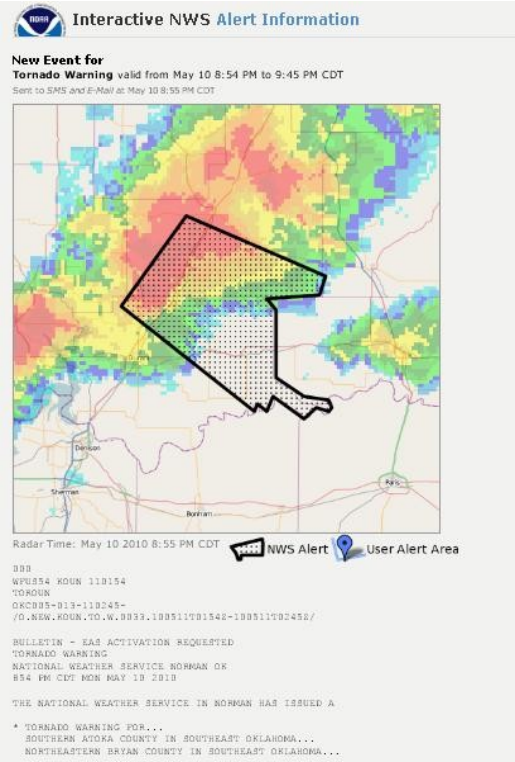
At this time AD DCs have been installed at 17 of Western Regions Field Offices. If your office has not yet scheduled time to perform the work required to install an AD DC locally please contact WR/SOD.

iNWS User Feedback

WR developed the iNWS project a few years back. As part of the NWS Product Description Document (PDD) process, a user survey was conducted during the last 16 months for the iNWS project. The results are provided below.

Background - iNWS provides real time SMS text and email alerts to primary partners. The NWS watch and warning message is provided through an innovative approach where the initial message is a short headline alert (less than 160 characters) with an embedded hyperlink to a graphic and text that provides more information. The graphic depicts the warning polygon over a map with radar imagery. The SMS and hyperlink graphics are designed to be displayed on smart phones and PDAs using very little internet bandwidth.

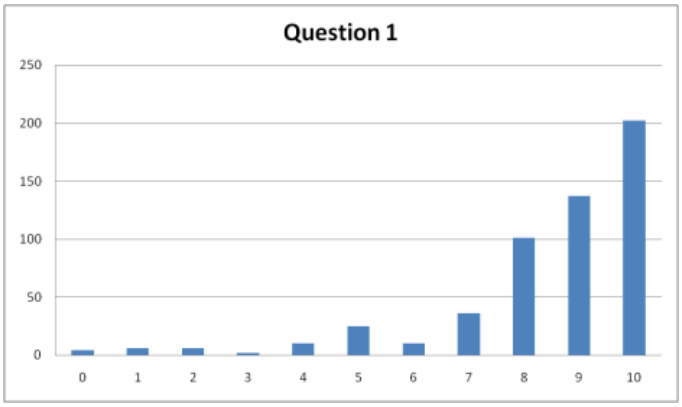
iNWS also provides an interactive web page for the user to select and name their own area of interest to be alerted for. iNWS is the only NWS dissemination system using the polygons to limit dissemination only to users who are affected by the polygon warning area. iNWS has a registration process and is limited to the primary community partners of the NWS, i.e. emergency managers, police, fire, media and other state and federal government groups. iNWS has 16,500 registered to date, including partners such as Craig Fugate, Administrator of FEMA, and state EOCs.



570 people responded over a period of May 11, 2010 to September 12, 2011.

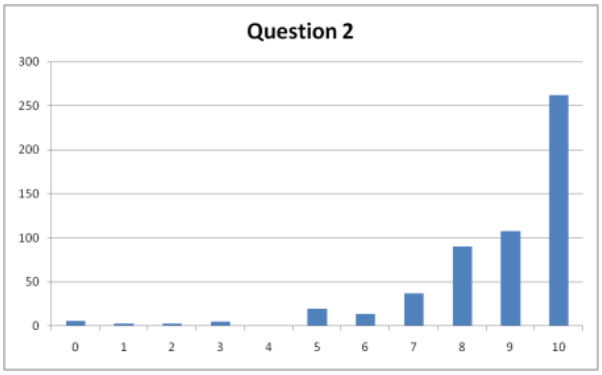
Question 1: On a scale of 0 to 10 (10 highest), rate technical quality of this product/service (e.g., forecast accuracy, timeliness, problems with display).

Summary: 539 people responded to this question, 81.64% responded with the high three categories (8,9 10), 88.34% when category 7 is included



Question 2: On a scale of 0 to 10 (10 highest), rate how easy you found the product/service to interpret and use.

Summary: 539 people responded to this question, 83.78% responded with the high three categories (8,9 10), 90.52% when category 7 is included



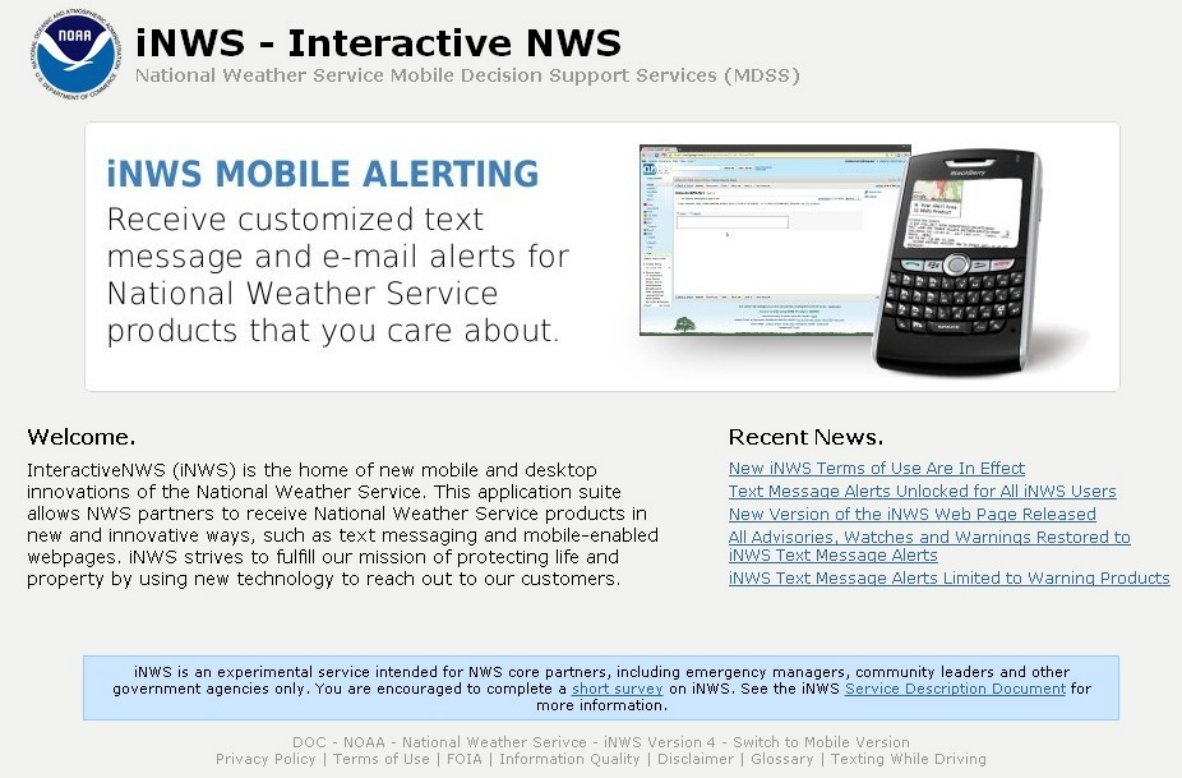
Question 8. Do you feel it is appropriate for NWS to provide this product/service?

"Yes" = 542 (95.09 %) "No" = 10 (1.75 %) "No response" = 18 (3.16%)

Most of the comments were very positive; a sampling is provided below:

- Craig Fugate (FEMA) "ties text with maps, gives better situational awareness"
- Virginia Emergency management: "I am a regional coordinator for the Virginia Department of Emergency Management, with responsibility for several localities. This tool gives me the ability to monitor weather impacts to my localities"
- Pennsylvania State Government: "The warnings are delivered to my e-mail and cell phones within seconds of being issued. Well done!"
- "Anything that can be done to quickly alert the emergency management / public safety community to real time hazards is beneficial."
- New Mexico Emergency Manager: "This is a great sharing enhancement between Emergency Management and the NWS"
- Police Captain: "Outstanding tool. Greatly needed asset in police work."
- Emergency manager: "I find this tool essential in determining my mass notification messages. The polygrams are extremely valuable as it takes a couple hours for a total county notification. Much less time for a notification to the affected area only... this is life saving."
- Emergency manager at a state facility (hospital): "The service is basically indispensable for awareness and rapid decision-making."
- TV station - Florida: "Please keep the program growing. I\'ve never been this enthusiastic about a NWS product. I love when you click the link, it shows the county map with radar superimposed with the warning polygon (at time of warning.) VERY helpful"
- Tribal Government Emergency Manager: "I find it very useful, and the graphic on warning areas is the best!"

- Rural Fire Department: “Awareness of fire weather conditions for personal use and to communicate with other personnel in the local volunteer fire department. The information should aid in preparedness for wildland fire conditions and possible callouts.”
- Fire Rescue EMS: “Provides timely actionable information to mobile devices used in the delivery of vital public safety and emergency services to the public.”
- Kentucky Emergency Manager: ”This is the first line of notification that I get, usually even before the EAS message comes across my weather radio.”
- New York Emergency Manager: “exactly what I was looking for emergency preparedness.”



Summary: The NWS watch and warning message is provided through an innovative approach where the initial message is a short headline alert (less than 160 characters) with an embedded hyperlink to a graphic and text that provides more information. iNWS has 16,500 Emergency Managers, fire, police, media and other state and federal government registered to date. The feedback from the year and a half of survey results has been very positive. New users can register at **http://inws.wrh.noaa.gov/**

Length of Service Awards

Allegretto, Leeann	WFO Missoula, MT	Meteorologist, General Forecaster	5 Years
Sullivan, Stefanie	WFO San Diego, CA	Meteorologist, General Forecaster	5 Years
Hosenfeld, Nanette	WFO Salt Lake City, UT	Meteorologist, Intern	5 Years
Erickson, Deborah	WRH/SOD Salt Lake City, UT	Administrative Support Assistant	10 Years
Bell, Charles	WFO Monterey, CA	Meteorologist, Lead Forecaster	10 Years
Rasmussen, Christopher	WFO Tucson, AZ	Meteorologist, General Forecaster	15 Years
Moede, Mark	WFO San Diego, CA	Meteorologist, Lead Forecaster	20 Years
Gomberg, David	WFO Oxnard, CA	Meteorologist, Lead Forecaster	20 Years
Bower, Brent	WFO Seattle, WA	Senior Service Hydrologist	25 Years
Kielhorn, Jessica	WFO Reno, NV	Hydrometeorological Technician	25 Years
Mollere, Gregory	WFO Tucson, AZ	Meteorologist, Lead Forecaster	25 Years
Collins, Clifford	WFO Elko, NV	Meteorologist, Lead Forecaster	25 Years
Riggs, Larry	WFO Flagstaff, AZ	Observing Program Leader	40 Years

New Hires in Western Region for September

Carroll, Scott	WFO Eureka, CA	Meteorologist, Lead Forecaster
Lindquist, Troy	WFO Boise, ID	Senior Service Hydrologist
Schultz, Chauncy	WFO Billings, MT	Meteorologist, General Forecaster
Olson, David	WFO Flagstaff, AZ	Electronics Technician
Schulz, Jeremy	WFO Pocatello, ID	Information Technology Officer
Church, David	WFO Billings, MT	Meteorologist, Intern
Fuentes, Paul	WFO Reno, NV	Meteorologist, General Forecaster
Leupold, Richard	WFO Tucson, AZ	Electronics Technician
Verzella, Lisa	WFO Salt Lake City, UT	Meteorologist, Intern

Please send newsletter submissions to:
matt.ocana@noaa.gov and claudia.bell@noaa.gov
by the **25th** of every month.